

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-4 (canceled)

Claim 5 (currently amended): An amine recovery apparatus for recovering an amine compound accompanying a decarbonated exhaust gas, comprising:

a water washing section configured to bring by bringing the decarbonated exhaust gas into vapor-liquid contact with washing water in a water washing section; and

a carbon dioxide absorption section configured to remove carbon dioxide from the decarbonated exhaust gas having had carbon dioxide absorbed and removed by vapor-liquid contact with an absorbing solution containing the amine compound in a carbon dioxide absorption section, characterized in that,

wherein the water washing section is constituted in a plurality of stages, and recovery of the amine compound accompanying the decarbonated exhaust gas is performed sequentially in the water washing sections in the plural stages.

Claim 6 (currently amended): The amine recovery apparatus of claim 5, characterized in that wherein regeneration tower refluxed water is supplied as washing water to the water washing section.

Claim 7 (currently amended): The amine recovery apparatus of claim 5 [[or 6]], characterized in that wherein washing water is withdrawn from the water washing section in the succeeding stage and supplied to the water washing section in the preceding stage.

Claim 8 (currently amended): The amine recovery apparatus of claim 5, 6 or 7, characterized in that wherein demisters are provided at outlets of the carbon dioxide absorption section and the water washing sections in the respective stages, and an absorbing

solution mist and a washing water mist accompanying the decarbonated exhaust gas are removed by the demisters.

Claim 9 (currently amended): A decarbonation apparatus characterized by having the amine recovery apparatus of claim 5, 6, 7 or 8 in an absorption tower.

Claim 10 (New): The amine recovery apparatus of claim 6, wherein washing water is withdrawn from the water washing section in the succeeding stage and supplied to the water washing section in the preceding stage.

Claim 11 (New): The amine recovery apparatus of claim 6, wherein demisters are provided at outlets of the carbon dioxide absorption section and the water washing sections in the respective stages, and an absorbing solution mist and a washing water mist accompanying the decarbonated exhaust gas are removed by the demisters.

Claim 12 (New): The amine recovery apparatus of claim 7, wherein demisters are provided at outlets of the carbon dioxide absorption section and the water washing sections in the respective stages, and an absorbing solution mist and a washing water mist accompanying the decarbonated exhaust gas are removed by the demisters.

Claim 13 (New): A decarbonation apparatus having the amine recovery apparatus of claim 6, in an absorption tower.

Claim 14 (New): A decarbonation apparatus having the amine recovery apparatus of claim 7, in an absorption tower.

Claim 15 (New): A decarbonation apparatus having the amine recovery apparatus of claim 8, in an absorption tower.